# Proper understanding of recurrent stress urinary incontinence treatment in women

Submission date	Recruitment status  No longer recruiting	Prospectively registered		
17/12/2019		[X] Protocol		
Registration date	Overall study status Stopped Condition category	Statistical analysis plan		
09/01/2020		Results		
Last Edited		Individual participant data		
24/11/2023	Urological and Genital Diseases	Record updated in last year		

#### Plain English summary of protocol

Background and study aims

Urinary leakage with physical activity is called stress urinary incontinence (SUI), and it affects about a quarter of women after pregnancy. Until recently, the most common treatment was a surgical operation which helps to support the tube which takes urine from the bladder to the outside (urethra), called midurethral (mesh) tape. Unfortunately, symptoms can come back after treatment, this is called recurrent SUI. In some cases, symptoms may never have gone away, this is called persistent SUI. Current treatment options for recurrent or persistent SUI include:

- 1. Injections into the urethra to help it to seal when leaks might happen called endoscopic bulking injections. The injections are done from a tube outside the body.
- 2. Surgical operations include:
- A medical mesh tape is placed in the vagina to support the urethra (midurethral tape)
- A strip of the patient's own tissue (taken from the tummy area) is used to support the urethra (autologous fascial sling)
- Stitches are used to lift the vagina so that it supports the urethra (colposuspension)
- An implant device is placed around the urethra to gently squeeze it and prevent leaking (artificial urinary sphincter)

It is not known which of these treatments is best for women who have already had an operation or injections for SUI. The aim of this study is to find out whether surgical operations or endoscopic bulking injections are better for treating recurrent or persistent SUI.

#### Who can participate?

Adult (18 years or older) women with recurrent or persistent SUI who have already had an operation or bulking injection for it

#### What does the study involve?

250 women are recruited to the study. Equal numbers of women join an endoscopic bulking injection group or a surgical operation group. Which group women join will be decided by chance (in a process called randomisation). Women in the surgical operation group decide which operation to have with their doctor. Women receive their treatment and aftercare at hospital as they would during normal NHS care and are asked to complete a questionnaire booklet at the start of the study and again 6 months, 1, 2 and 3 years later. The questionnaires cover general health, urinary symptoms and the effect of those symptoms on everyday life and sex life. The

researchers audio-record consultations where the study is discussed with women and interview some women to see how research is explained and understand how women manage after their treatment.

What are the possible benefits and risks of participating?

Some people enjoy being part of research studies because of the close contact with research staff and the opportunity to share their opinions and experiences of their condition and treatments. Women will be offered a £10 voucher for completing their questionnaire at 1 year and another £10 voucher for completing their questionnaire at 3 years. There is no additional risk to normal NHS practice of the endoscopic bulking injections or surgical operations, and neither are new or experimental. Women taking part will have the same risks as anyone having treatment for recurrent SUI. This includes the possibility that symptoms may not improve as much as women would like. The risks and benefits of each treatment will be explained by the doctors, and women will be provided with relevant hospital leaflets.

#### Where is the study run from?

This study is sponsored by North Bristol NHS Trust. The Bristol Randomised Trials Collaboration (as part of the Bristol Trials Centre) at the University of Bristol is responsible for managing the study. The researchers aim to run the study in 20 NHS hospitals across the UK.

When is the study starting and how long is it expected to run for? April 2019 to October 2022

Who is funding the study?

National Institute of Health Research (NIHR) Health Technology Assessment (HTA) Programme (UK)

Who is the main contact? Dr Caroline Pope pursuit-trial@bristol.ac.uk

#### Study website

https://pursuit.blogs.bristol.ac.uk/

# **Contact information**

# Type(s)

Public

#### Contact name

Dr Caroline Pope

#### ORCID ID

http://orcid.org/0000-0002-7856-6042

#### Contact details

Bristol Trials Centre (BRTC) Bristol Medical School University of Bristol Room 3.12, Canynge Hall 39 Whatley Road Bristol United Kingdom BS8 2PS +44 (0)117 9287219 pursuit-trial@bristol.ac.uk

# Additional identifiers

#### **EudraCT/CTIS** number

Nil known

#### IRAS number

257547

#### ClinicalTrials.gov number

Nil known

#### Secondary identifying numbers

Sponsor reference: #4404, HTA 17/95/03, IRAS ID 257547

# Study information

#### Scientific Title

Proper Understanding of Recurrent Stress Urinary Incontinence Treatment in women (PURSUIT): a randomised controlled trial of endoscopic and surgical treatment

#### Acronym

**PURSUIT** 

#### **Study objectives**

To determine whether surgical treatment is superior to endoscopic bulking injections in terms of symptom severity at 1-year after randomisation, in women with recurrent SUI.

# Ethics approval required

Old ethics approval format

### Ethics approval(s)

Approved 19/12/2019, South West - Frenchay Research Ethics Committee (Level 3, Block B, Whitefriars, Lewins Mead, Bristol, BS1 2NT, UK; Tel: +44 (0)207 1048 045; Email: nrescommittee. southwest-frenchay@nhs.net), ref: 19/SW/0209

### Study design

Two-arm multi-centre interventional randomised controlled trial

# Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

#### Study setting(s)

Hospital

#### Study type(s)

Treatment

#### Participant information sheet

Not available in web format, please use the contact details to request a Participant Information Leaflet.

#### Health condition(s) or problem(s) studied

Recurrent or persistent Stress Urinary Incontinence (SUI)

#### Interventions

Participants will be randomised on a 1:1 basis using an online randomisation system or automated telephone system:

Arm 1 - endoscopic (urethral) bulking injections

Arm 2 - surgical procedure (colposuspension or autologous urethral sling or midurethral tape or artificial urinary sphincter (AUS)); women in the surgical operation group will decide which operation to have with their doctor

Women will receive their treatment and aftercare at hospital, as they would during normal NHS care and will be asked to complete a questionnaire booklet at the start of the study and again 6 months, 1, 2 and 3 years later. The questionnaires cover general health, urinary symptoms and the effect of those symptoms on everyday life and sex life. The researchers will audio-record consultations where the PURSUIT study is discussed with women and interview some women to see how research is explained and understand how women manage after their treatment.

#### Intervention Type

Procedure/Surgery

#### Primary outcome measure

Patient-reported outcome measure (PROM) of continence using the International Consultation on Incontinence Questionnaire - Urinary Incontinence - Short Form (ICIQ-UI-SF) at 1 year after randomisation

#### Secondary outcome measures

- 1. Clinical subjective measure of continence (longer term) using the ICIQ-UI-SF questionnaire at 6 months, 2 and 3 years post randomisation
- 2. Improvement of symptoms measured using the Patient Global Impression of Improvement (PGI-I) questionnaire at 1, 2 and 3 years post randomisation
- 3. Procedure/operative assessment measures: assessment of procedure/operation time, estimated blood loss, hospital stay, and return to normal activity, measured at time of intervention and at 6 months post-intervention
- 4. Incontinence and sexual function assessed using the Pelvic Organ Prolapse/Incontinence Sexual Questionnaire (PISQ-IR) at 1, 2 and 3 years post randomisation
- 5. Adverse events: evaluation of treatment and retreatment, adverse events of each intervention at intervention, 6 months post intervention, and 6 months, 1, 2 and 3 years post randomisation
- 6. Cost-effectiveness from an NHS and societal perspective in terms of Quality-Adjusted Life Years (QALYs) and ICIQ-UI-SF at 1 year, and from a secondary care NHS perspective in terms of

QALYs at 3 years. EQ-5D-5L (used to calculate QALYs) questionnaire at 6 months, 1, 2 and 3 years post-randomisation. Secondary care resource use from Trust electronic systems (or Hospital Episode Statistics) at 1 and 3 years post-randomisation. Community-based and patient resource use questionnaire at 6 months and 1 year post-randomisation

- 7. Patient experiences of the intervention, assessed using qualitative interviews with patients at 6 months, 1 year and 3 years post-intervention
- 8. Clinician views of the intervention, assessed using qualitative interviews with clinicians around baseline

#### Overall study start date

01/04/2019

#### Completion date

04/10/2022

#### Reason abandoned (if study stopped)

Lack of funding/sponsorship

# **Eligibility**

#### Key inclusion criteria

- 1. Adult women (≥18-years) with bothersome Stress Urinary Incontinence (SUI) symptoms after primary SUI surgery (including bulking injections)
- 2. Urodynamics to confirm recurrent or persistent SUI
- 3. Patient willing to consider interventional therapy
- 4. Patient willing to be randomised and willing to give consent

#### Participant type(s)

Patient

#### Age group

Adult

#### Lower age limit

18 Years

#### Sex

Female

#### Target number of participants

250

#### Total final enrolment

23

#### Key exclusion criteria

- 1. Predominant urgency incontinence
- 2. Pelvic organ prolapse (POP) more than or equal to stage II
- 3. Relevant neurological disease, disease, such as a stroke, multiple sclerosis, Parkinson's disease, or spina bifida (diabetes mellitus is not an exclusion criterion unless it is causing diabetic

#### neuropathy)

- 4. Being treated for gynaecological or bladder cancer
- 5. Unresolved mesh exposure from previous midurethral tape (MUT)
- 6. Current pregnancy
- 7. Urethral diverticulum
- 8. Recent pelvic surgery (e.g. POP repair, stress incontinence surgery, and hysterectomy within the last 6-months)
- 9. Participation in another study that might influence results or increase patient burden
- 10. Unable to give informed consent/complete assessments
- 11. Previous artificial urinary sphincter (AUS) surgery

#### Date of first enrolment

10/12/2019

#### Date of final enrolment

11/07/2022

# Locations

#### Countries of recruitment

England

Scotland

United Kingdom

#### Study participating centre North Bristol NHS Trust

Southmead Hospital Southmead Road Westbury on Trym Bristol United Kingdom BS10 5NB

# Study participating centre NHS Ayrshire and Arran

PO Box 13 Boswell House 10 Athur Street Ayr United Kingdom KA7 1QJ

#### University College London Hospitals NHS Foundation Trust

250 Euston Road London United Kingdom NW1 2PG

## Study participating centre Birmingham Women's and Children's NHS Foundation Trust

Steelhouse Lane Birmingham United Kingdom B4 6NH

# Study participating centre Sheffield Teaching Hospitals NHS Foundation Trust

Northern General Hospital Herries Road Sheffield United Kingdom S5 7AU

## Study participating centre Cambridge University Hospitals NHS Foundation Trust

Hills Road Cambridge United Kingdom CB2 0QQ

#### Study participating centre South Tees Hospitals NHS Foundation Trust

The James Cook University Hospital Marton Road Middlesbrough United Kingdom TS4 3BW

# Study participating centre Royal Cornwall Hospitals NHS Trust

Royal Cornwall Hospital Treliske Truro United Kingdom TR1 3LJ

# Study participating centre East Lancashire Hospitals NHS Trust

Royal Blackburn Hospital Haslingden Road Blackburn United Kingdom BB2 3HH

## Study participating centre Leeds Teaching Hospitals NHS Trust

St. James's University Hospital Beckett Street Leeds United Kingdom LS9 7TF

# Study participating centre Stockport NHS Foundation Trust

Stepping Hill Hospital Poplar Grove Stockport United Kingdom SK2 7JE

# Study participating centre Northern Care Alliance NHS Foundation Trust

Salford Royal Stott Lane Salford United Kingdom M6 8HD

# Study participating centre Liverpool Women's NHS Foundation Trust Liverpool Womens Hospital

Crown Street

Liverpool United Kingdom L8 7SS

## Study participating centre Bedfordshire Hospitals NHS Foundation Trust

Lewsey Road Luton United Kingdom LU4 0DZ

# Study participating centre Mid and South Essex NHS Foundation Trust

Prittlewell Chase Westcliff-on-sea United Kingdom SSO ORY

# Sponsor information

#### Organisation

North Bristol NHS Trust

#### Sponsor details

Research & Innovation, Level 3
Learning & Research Building
Southmead Hospital
Westbury-on-Trym
Bristol
England
United Kingdom
BS10 5NB
+44 (0)117 4149330
researchsponsor@nbt.nhs.uk

### Sponsor type

Hospital/treatment centre

#### Website

https://www.nbt.nhs.uk/

# Funder(s)

#### Funder type

Government

#### **Funder Name**

Health Technology Assessment Programme

#### Alternative Name(s)

NIHR Health Technology Assessment Programme, HTA

#### **Funding Body Type**

Government organisation

#### **Funding Body Subtype**

National government

#### Location

United Kingdom

# **Results and Publications**

#### Publication and dissemination plan

The protocol will be available online at https://www.fundingawards.nihr.ac.uk/award/17/95/03.

The results of the study will be published in the academic press and provided to the sponsor for publishing on the sponsor's research website. The researchers will also publish results on the University of Bristol study website. They will work with their Patient and Public Involvement (PPI) partners to prepare lay summaries to enhance broader dissemination and engagement. All participants will be offered a lay summary of the main findings of the study. The trial will also be presented at national and international conferences such as the International Continence Society (ICS). This will in turn be used by the national and international community to inform practice, with incorporation into the National Institute for Health and Care Excellence (NICE) Guidelines and other international Guidelines such as those of the European Association of Urology.

The findings of the trial will be disseminated nationally through The British Association of Urological Surgeons (BAUS) and The British Society of Urogynaecology (BSUG), part of the Royal College of Obstetrics and Gynaecology, as these are the specialist bodies with the responsibility for guiding clinical practice, policy matters, research priorities, governance and training in matters related to incontinence. BAUS and BSUG are well placed to implement the findings by informing NHS policy (NICE) and by dissemination of evidence-based clinical practice to its members. The trial results will be uploaded within 1 year of the last patient last visit.

# Intention to publish date

31/03/2025

#### Individual participant data (IPD) sharing plan

Anonymous study data will be kept securely on the University of Bristol Research Data Storage Facility (RDSF, https://www.bristol.ac.uk/acrc/research-data-storage-facility/). After the study is finished, requests for access to data should be made via the University of Bristol Research Data Repository (https://data.bris.ac.uk/data/). Requests must be via a written confidentiality and data sharing agreement (DSA) which will be confirmed/approved by the Chief Investigator. The DSA should cover limitations of use, transfer to third parties, data storage and acknowledgements. The person applying for use of the data will be scrutinised for appropriate eligibility by the research team/CI. The approved Participant Consent Form for the study includes the clause "I understand that the information collected about me will be used to support other research in the future and may be shared anonymously with other researchers".

#### IPD sharing plan summary

Stored in repository

#### **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Protocol article</u>		03/08/2022	04/08/2022	Yes	No
HRA research summary			26/07/2023	No	No